Accelerating Student Learning: Monitoring Reading

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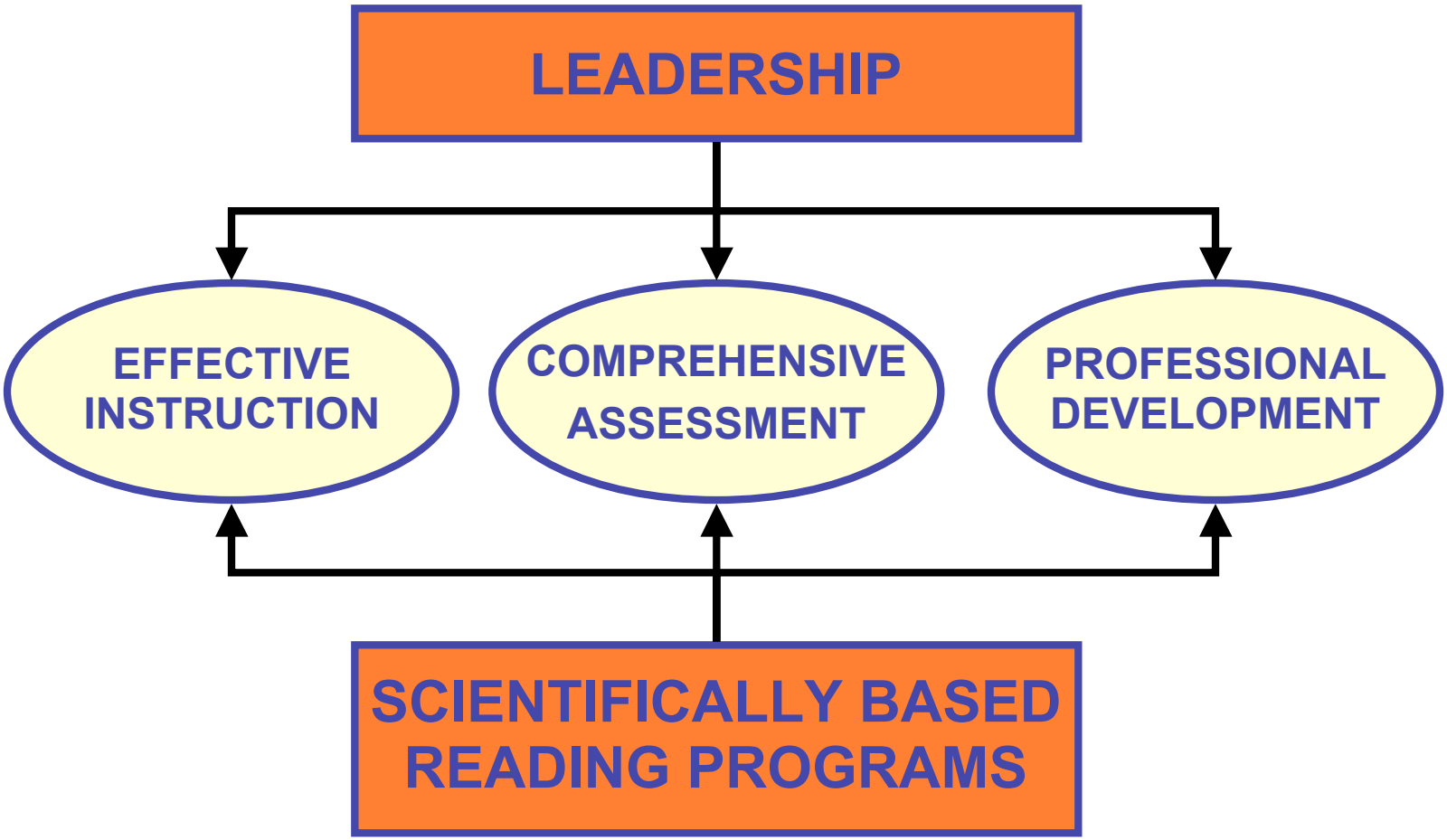
No Child LEFT BEHIND

summer workshop

We measure what we treasure.....

School-Wide Reading Improvement

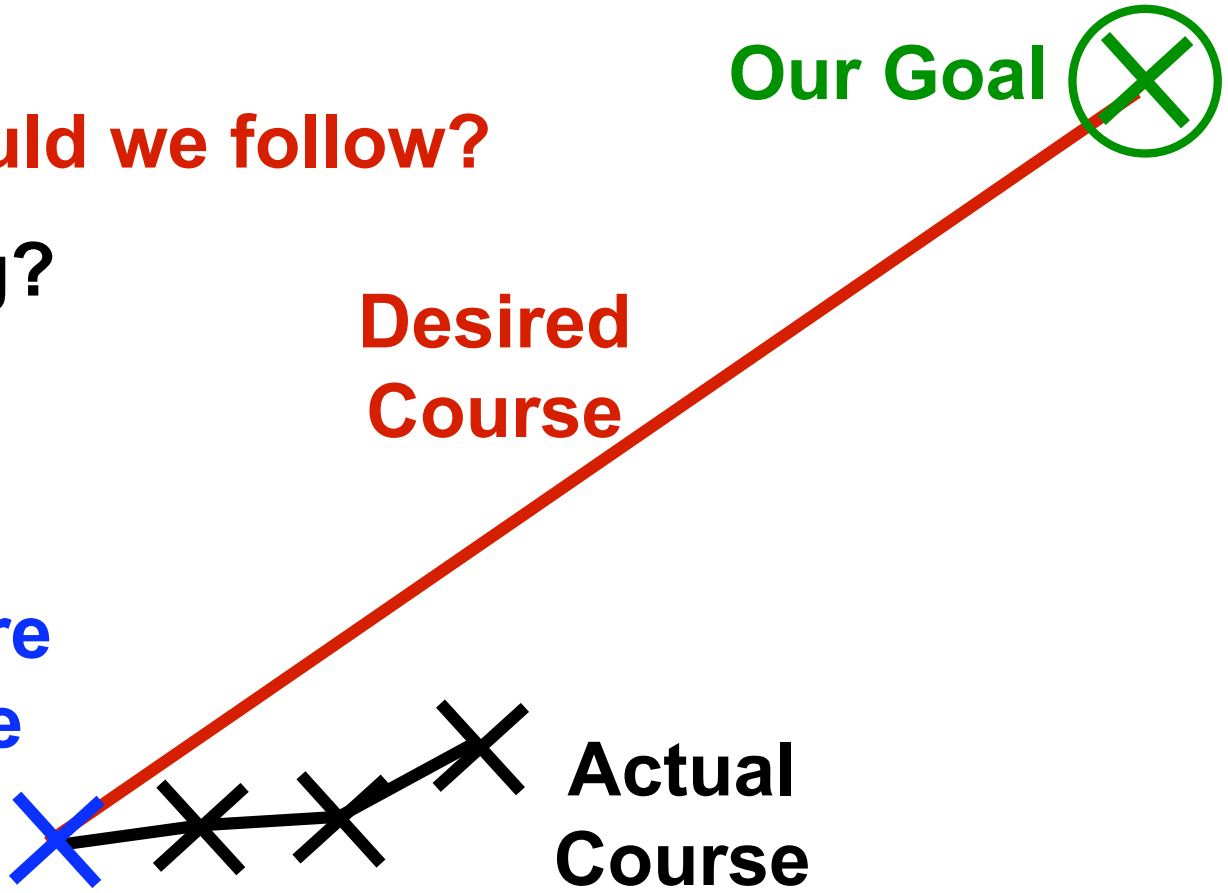


Where are we?

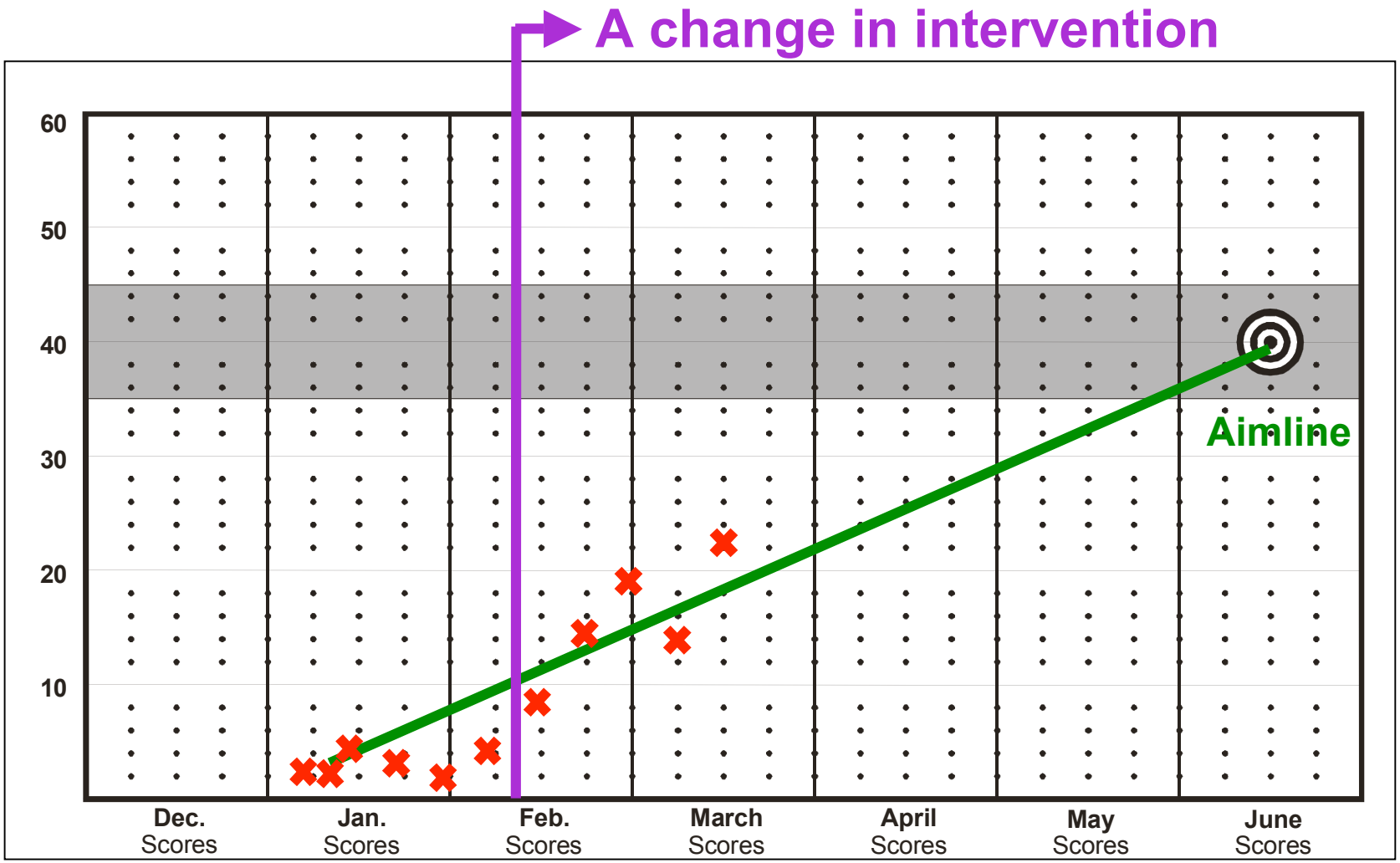
What is our goal?

What course should we follow?

How are we doing?



Progress Monitoring: The Teacher's Map



Progress Monitoring

- ***Progress Monitoring is the ongoing process of***
  - collecting and analyzing data to determine student progress toward general outcomes.
  - making instructional decisions based on the review and analysis of student data.

- ***Curriculum-Based Assessment***
  - A procedure for determining the instructional needs of a student based upon the student's ongoing performance within existing course content.

Oral Reading Fluency

- **Provides formative assessment of student performance –an important outcome and indicator!**
- **Provides formative miscue analysis**
- **Allows teachers to assess qualitative features of good reading**
- **Allows for assessment of accuracy and fluency**
- **Includes predictive validity (e.g., first grade reading outcomes are strongly related to third grade outcomes)**

- **Materials Needed**
  - Unnumbered copy of passage (student copy)
  - Numbered copy of passage (examiner copy)
  - Stopwatch
  - Pencil
  - Colored Pencil (for indicating aimline on graphs)

Oral Reading Fluency Directions

1. **Place the unnumbered passage in front of the student.**
2. **Place the numbered passage in front of you but shielded so the student cannot see what you record.**
3. **Say these specific directions to the student for the first passage:**

   When I say "begin," start reading aloud at the top of the page.

   Read across the page (DEMONSTRATE).

   Try to read each word. If you come to a word you don't know, I'll tell it to you. Be sure to do your best reading. (pause)
4. **Say "Begin" and start your stopwatch when the student says the first word. If the student fails to say the first word of the passage after 3 seconds, tell the student the word and mark it as incorrect, then start your stopwatch.**
5. **Follow along on your copy. Put a slash (/) through words read incorrectly.**
6. **If a student stops or struggles with a word for 3 seconds, tell the student the word and mark it as incorrect.**
7. **After 1-minute, place a bracket ( ]) after the last word and say, "Stop."**

Sample Passage - Examiner Copy

It was a pretty good composition. I felt proud knowing	10
it was the best one at my school. After I'd read it five times,	24
I was impatient to start reading it out loud.	33
I followed the book's directions again. First I read the	43
composition out loud without trying to sound impressive, just	52
times. Then I moved over to my full-length mirror and read the	65
composition out loud in front of it a few times. At first I just	79
read it. Then I practiced looking up and making eye contact.	90

Total Words Read: _____
Errors: _____
Words Read Correctly: _____

Scoring Reading Passages

- **What is a "word"?**

example

cat TW = 1

read as:

"cat" WRC = 1

example

I sat TW = 2

read as:

"I sat." WRC = 2

What is a "correctly read word?"

Rule 1. Correctly Read Words are pronounced correctly. A word must be pronounced correctly given the context of the sentence.

example: The word "r-e-a-d" must be pronounced "reed" when presented in the context of:

He will read the book WRC = 5

not as:

"He will red the book." WRC = 4

Rule 2. Self-Corrected Words are counted as correct. Words misread initially but corrected within 3 seconds, are counted as read correctly.

example: The river was cold.

WRC = 4

read as:

The river was could...(2 seconds).. cold

WRC = 4

What is a "correctly read word?"

Rule 3. Repeated Words are counted as correct. Words said over again correctly are ignored.

example:

Ted ran swiftly.	WRC = 3
read as:	
"Ted ran...Ted ran swiftly."	WRC = 3

Rule 4. Dialect Variations in pronunciation that are explainable by local language norms are not errors.

example:

They washed the car.	WRC = 4
read as:	
"They warshed the car."	WRC = 4

What is a "correctly read word?"

Rule 5. Inserted Words are ignored. **When a student adds extra words, they are not counted as correct words nor as reading errors.**

example:

Sue was happy.	WRC = 3
read as:	
"Sue was very happy."	WRC = 3

Rule 6. Mispronounced or Substituted **Words are counted as incorrect.**

example:

The dog ate the bone.	WRC = 5
read as:	
"The dig ate the bone."	WRC = 4

What is an "incorrectly read word?"

Rule 7. Omitted Words are counted as errors

example:

Mario climbed the oak tree. WRC = 5

read as:

"Mario climbed the tree." WRC = 4

Rule 8. Hesitations When a student hesitates or fails to correctly pronounce a word within 3 seconds, the student is told the word and an error is scored.

example:

Mark saw an elephant. WRC = 4

read as:

"Mark saw an...(sec 3)." WRC = 3

or read as:

Mark saw an ell-ee...(3 sec)" WRC = 3

What is an "incorrectly read word?"

Rule 9. Reversals. **When a student transposes two or more words, those words not read in the correct order are errors.**

example:

Charlie ran quickly. WRC = 3

read as:

"Charlie quickly ran." WRC = 1

Rule 10. Numbers **Written as numerals are counted as words and must be read correctly within the context of the passage.**

example:

May 5, 1999. WRC = 3

read as:

"May five, one nine eight nine." WRC = 1

What is an “incorrectly read word?”

Rule 11a. Hyphenated Words. **Each morpheme separated by a hyphen(s) is counted as an individual word if it can stand alone.**

example:

Fifty-seven.	WRC = 2
“Daughter-in-law.”	WRC = 3

Rule 11b. Hyphenated Words. **If one or more of the morphemes separated by a hyphen(s) cannot stand alone, the entire sequence is counted as one word.**

example:

co-opt	WRC = 1
“re-evaluate.”	**WRC = 1**

What is an “incorrectly read word?”

Rule 12. Abbreviations are counted as words, and must be read correctly within the context of the sentence.
example:

Dr. Adams received a promotion.	WRC = 5
should be read as:	
“Doctor Adams received a promotion.”	WRC = 5
not as:	
“D-R Adams received a promotion.”	WRC = 4

Qualitative Features of Good Reading

- **Is highly fluent (speed and accuracy)**
- **Uses effective strategies to decode words.**
  - effective word attack
  - context
- **Adjust pacing (i.e., slows down and speeds up according to level of text difficulty)**
  - of word(s)
  - syntax (word order)
  - semantics (word meaning)

4. **Attends to prosodic features.**
   - inflection (pause, voice goes up and down)
   - reads with expression
   - punctuation (commas, exclamation points, etc.
   - predicts level of expression according to syntax

Qualitative Features of Good Reading

Possesses prediction-orientation

- seems to look ahead when reading
- reads at a sentence or paragraph level

Self-monitors what she/he is reading.

- Self-corrects if makes meaning distortion errors

Makes only meaning preservation errors.

- more errors that preserve meaning (e.g., “house” for “home”)
- fewer meaning distortion errors (e.g., “mouse” for “house.”)

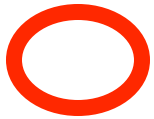
Automaticity on reread words.

- words that appear throughout text are read automatically (e.g., become “sight words”)

Graphing Data

1. **Establish baseline**: Median of three passages administered on the same day

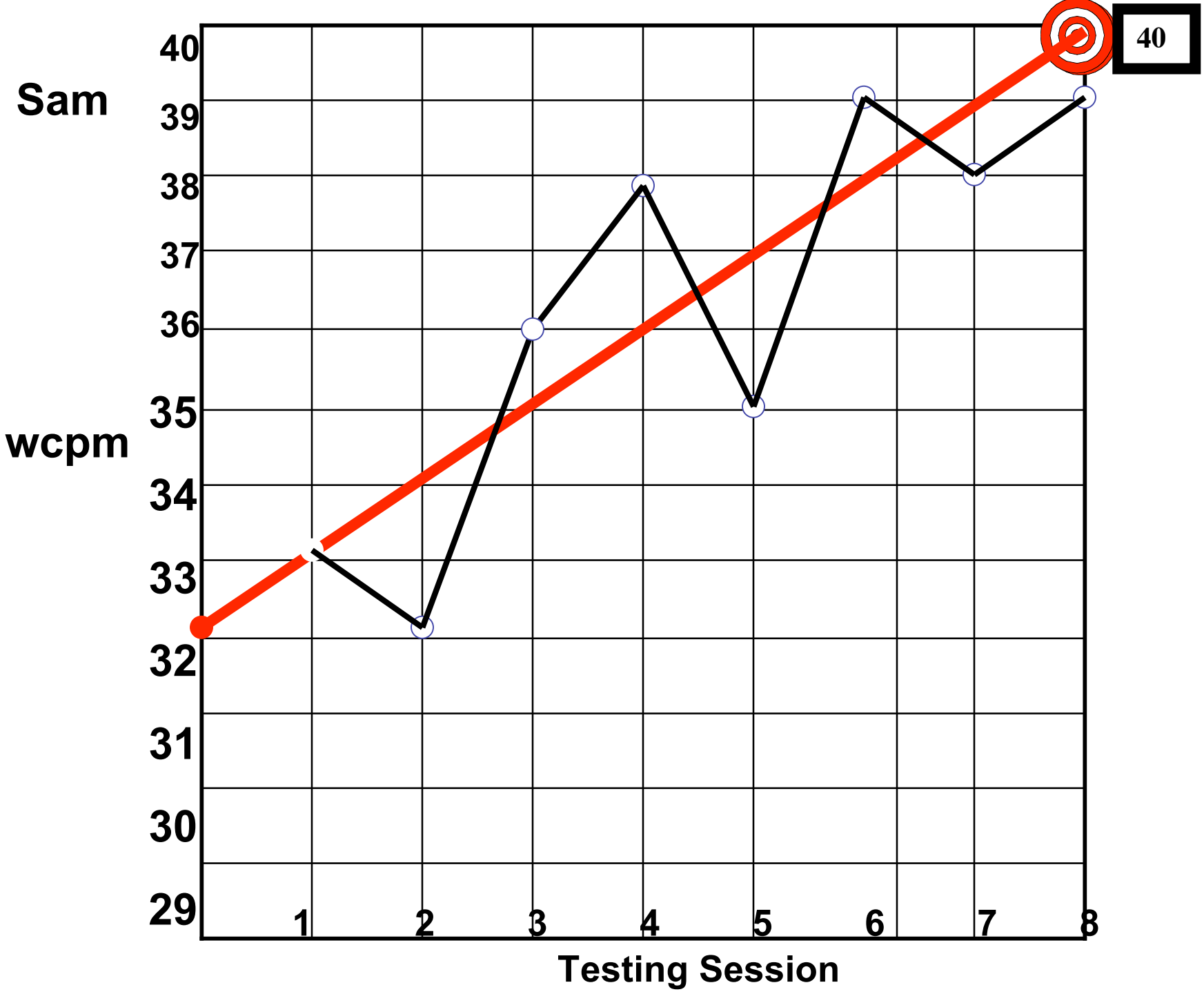
Passage 1:	32 wcpm
Passage 2:	40 wcpm
Passage 3:	27 wcpm



2. **Set up graph:**
   - Write student name on the graph;
   - Mark vertical axis with NUMBER OF WORDS READ CORRECTLY;
   - Mark horizontal axis with TESTING SESSIONS/DATE;
   - Mark baseline score on vertical axis in pencil
3. **Set Goal:**
   - For 2 word per week improvement over baseline (one word per test session; mark goal at last testing session for the project)

Graphing Data

4. **Draw Aimline:** In colored pencil, draw line from baseline to goal
5. **Measure Student Performance:** Twice per week
6. **Plot Student Performance:** On graph in pencil
7. **Connect Indicators of Student Performance:** to show trend line
8. **Analyze Student Performance:** Show progress, by checking last six data points. If four of the last six points are below aimline, student is not making adequate progress
9. **Make Instructional Changes:** If indicated by student performance
10. **Continue to Measure and Monitor Student Performance**


Sam
wcpm
40
39
38
37
36
35
34
33
32
31
30
29
1
2
3
4
5
6
7
8
Testing Session
40

Graphing Practice # 1

Kyle

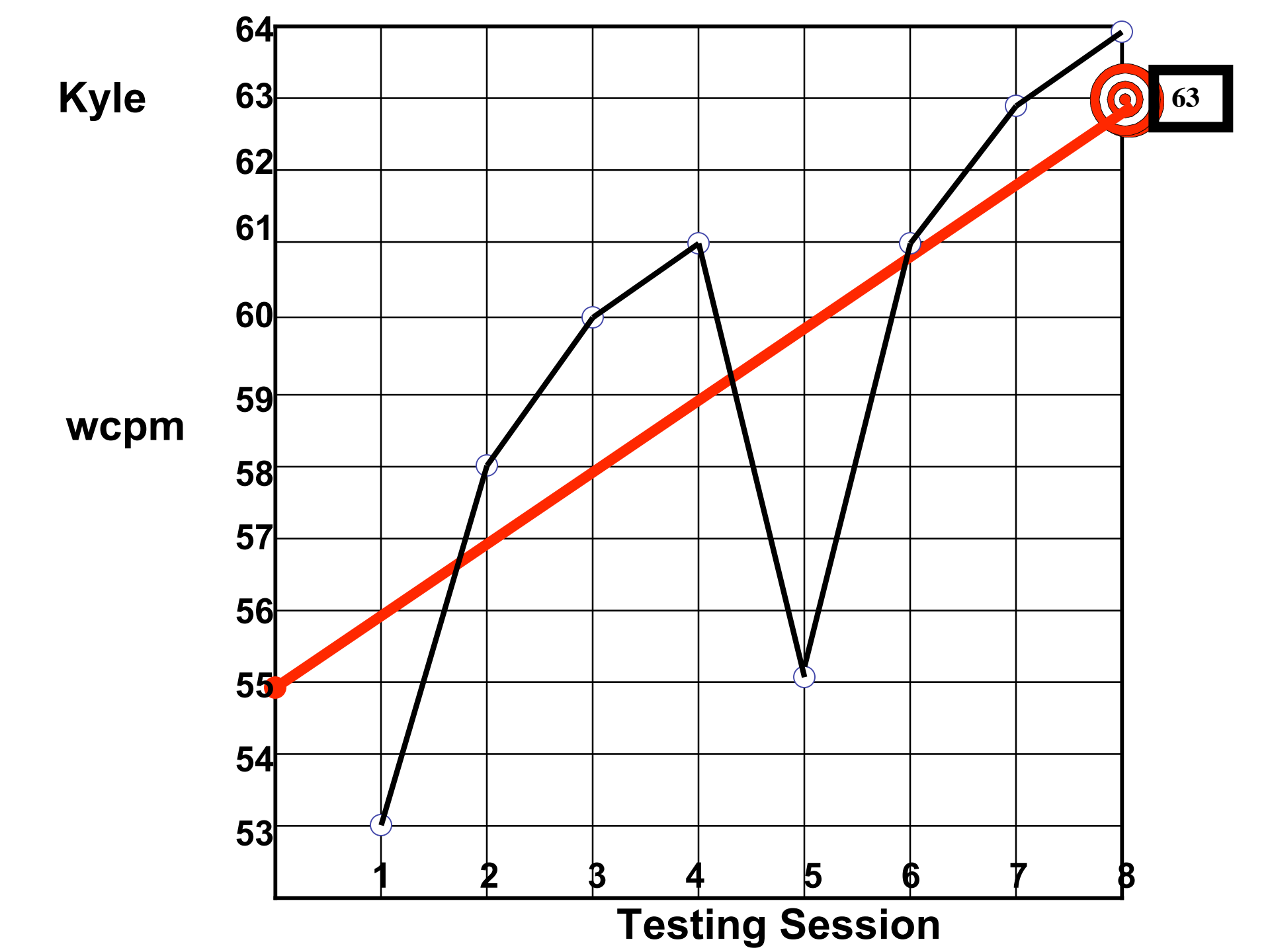
•Baseline:

Passage 1:	53 wcpm
Passage 2:	60 wcpm
Passage 3:	55 wcpm

•Determine Goal and Draw Aimline

•Graph ORF Scores:

Session 1:	53 wcpm
Session 2:	58 wcpm
Session 3:	60 wcpm
Session 4:	61 wcpm
Session 5:	55 wcpm
Session 6:	61 wcpm
Session 7:	63 wcpm
Session 8:	64 wcpm


Kyle
wcpm
64
63
62
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1
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8
Testing Session
63

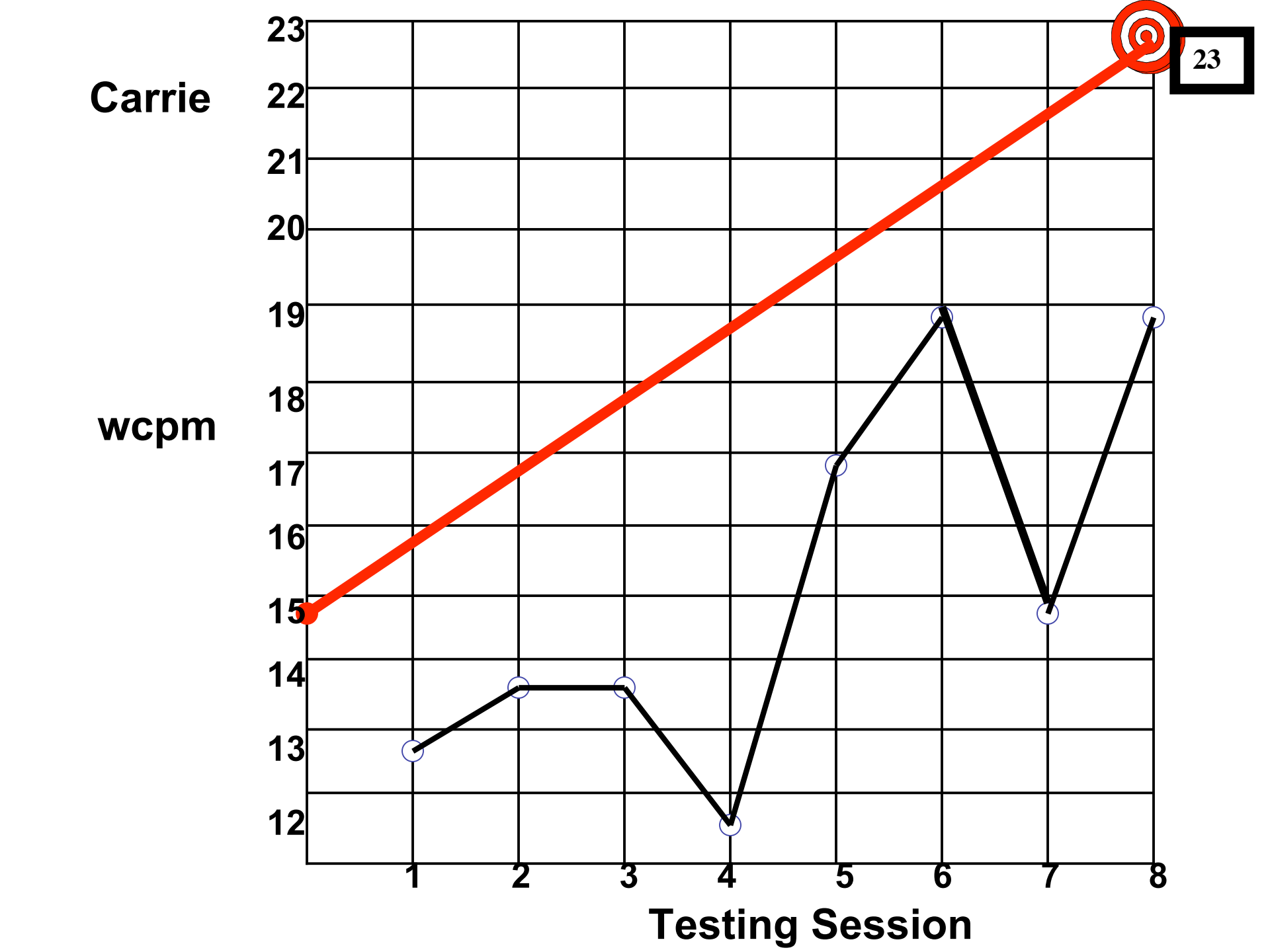
Interpreting Data: Making Instructional Decisions

At least three characteristics of graphed data can be used to describe and summarize student performance:

(a) Level of performance

(b) Slope of performance

(c) Variability of performance


Carrie
wcpm
23
22
21
20
19
18
17
16
15
14
13
12
1
2
3
4
5
6
7
8
Testing Session
23

Interpreting Data: Making Instructional Decisions

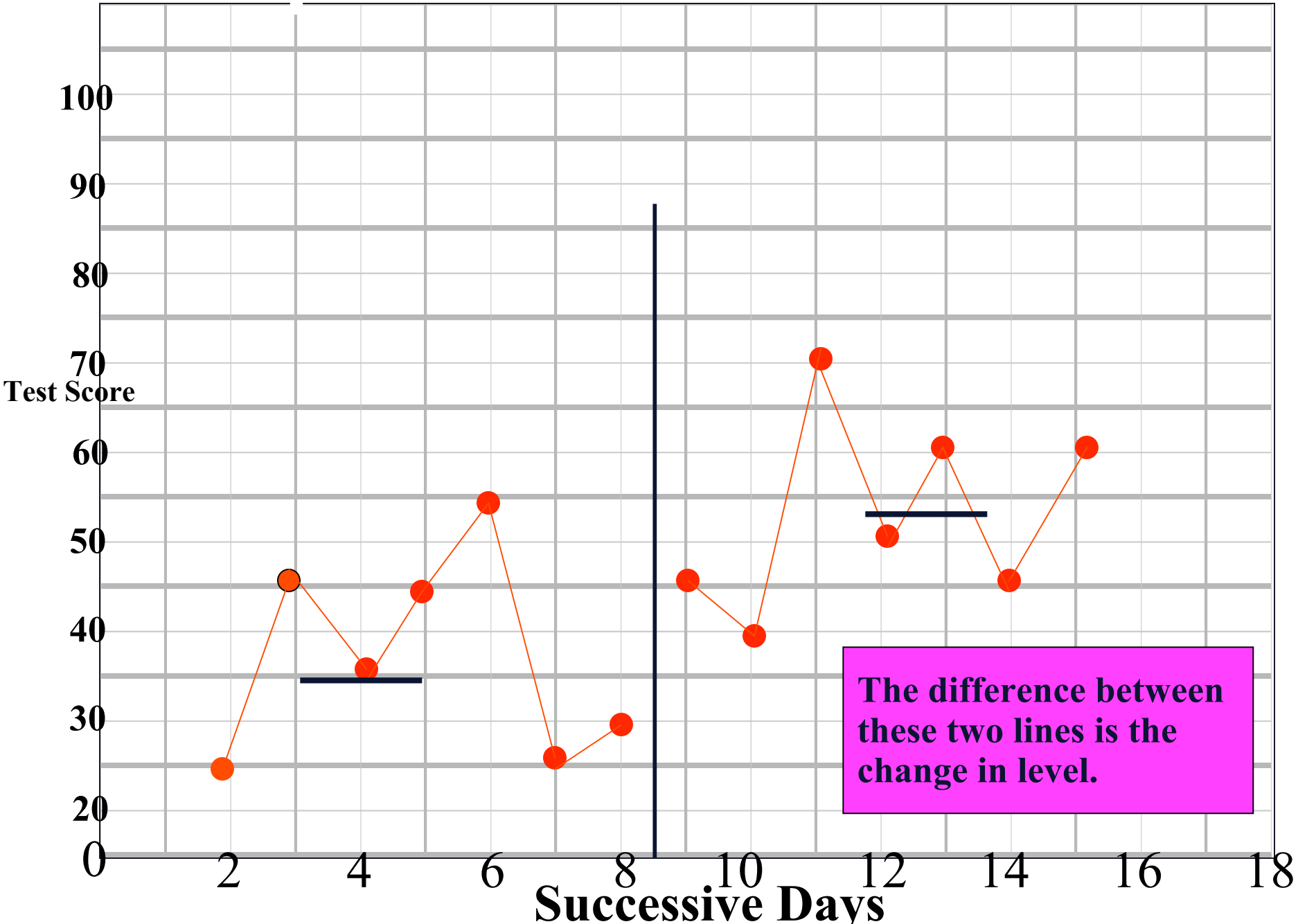
At least three characteristics of graphed data can be used to describe and summarize student performance:

(a) Level of performance

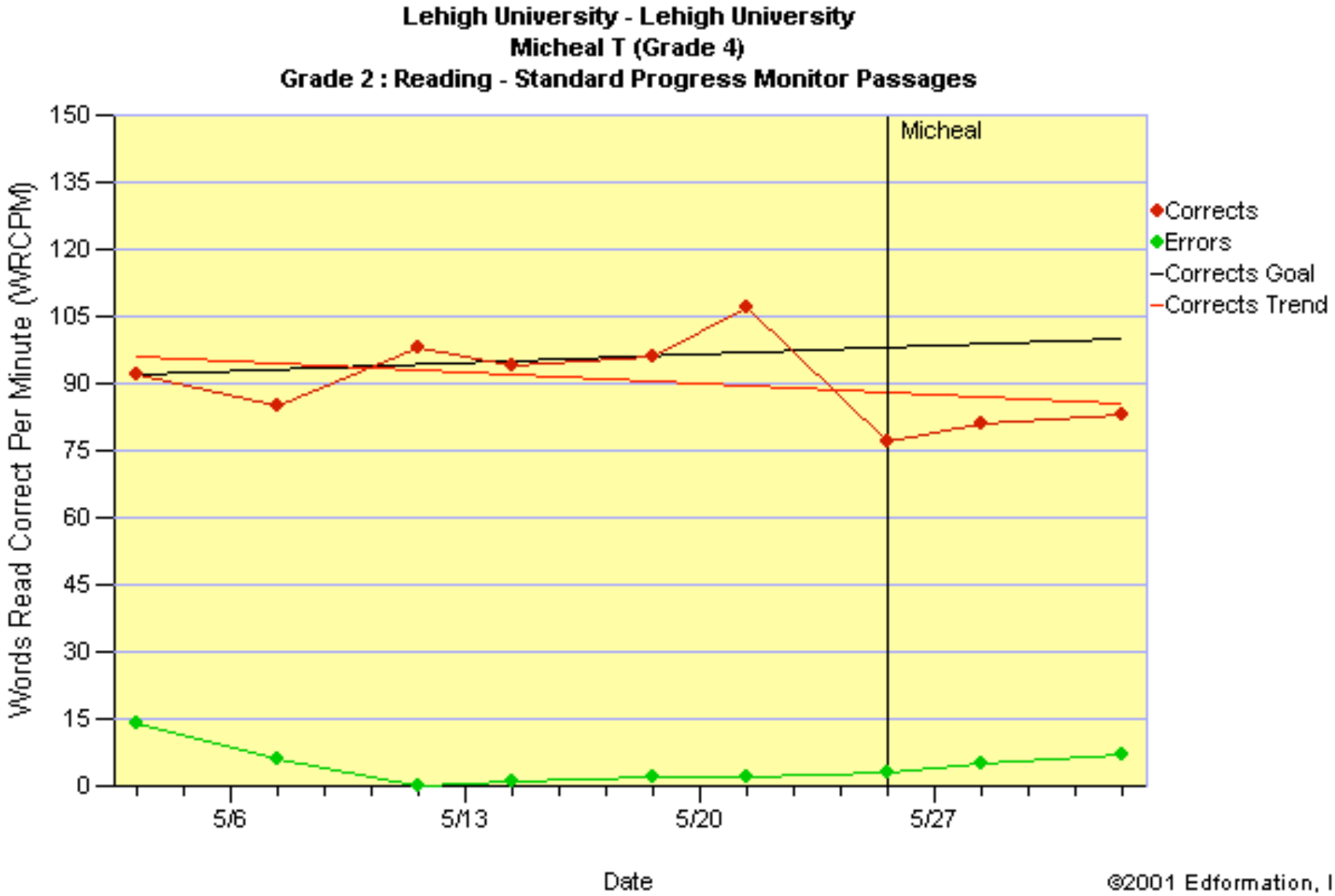
(b) Slope of performance

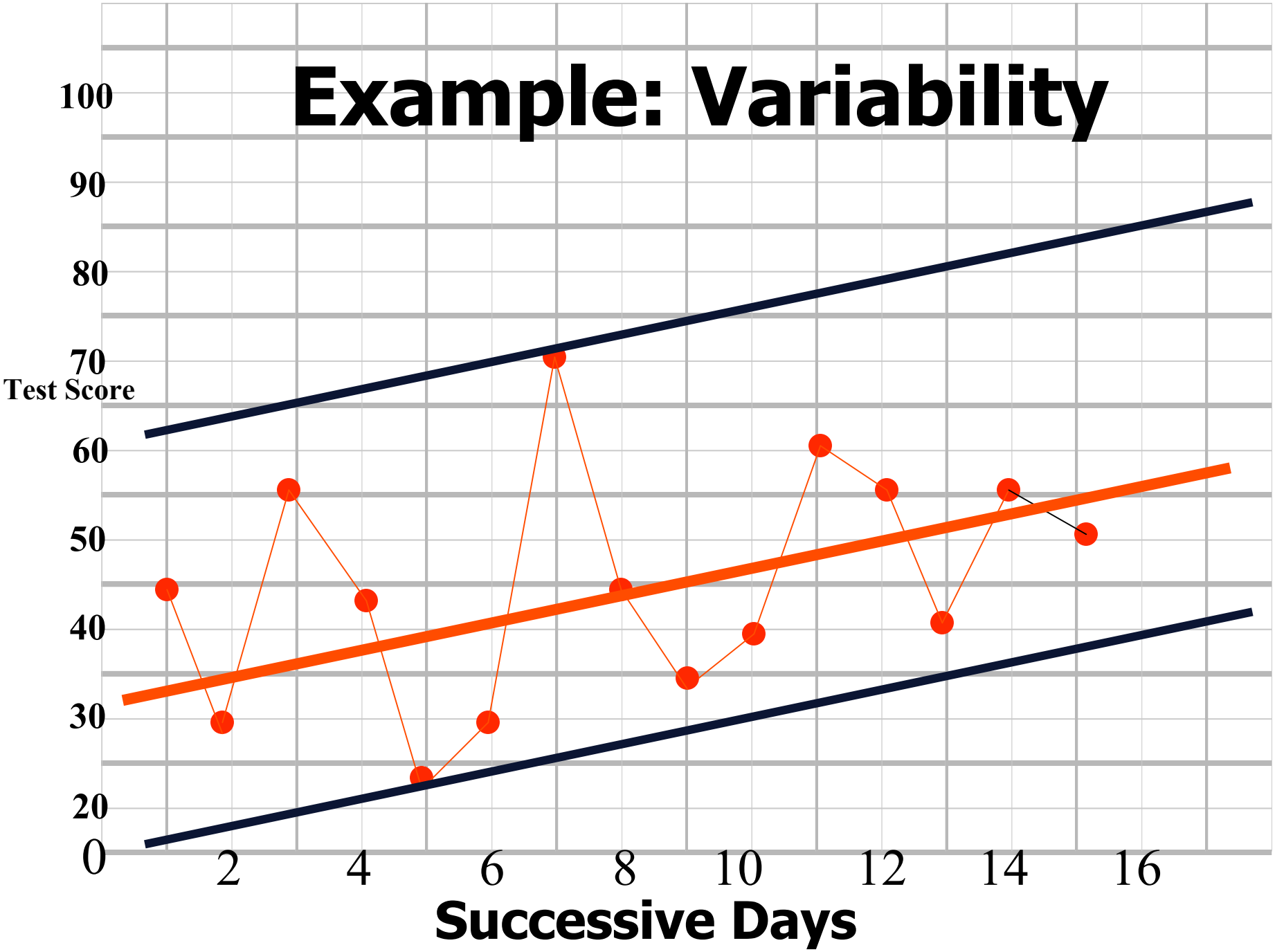
(c) Variability of performance

Example: Levels of Performance



Example: Slope/Trend




Example: Variability
100
90
80
70
60
50
40
30
20
0
Test Score
2
4
6
8
10
12
14
16
Successive Days

Goal-Oriented Decision Making

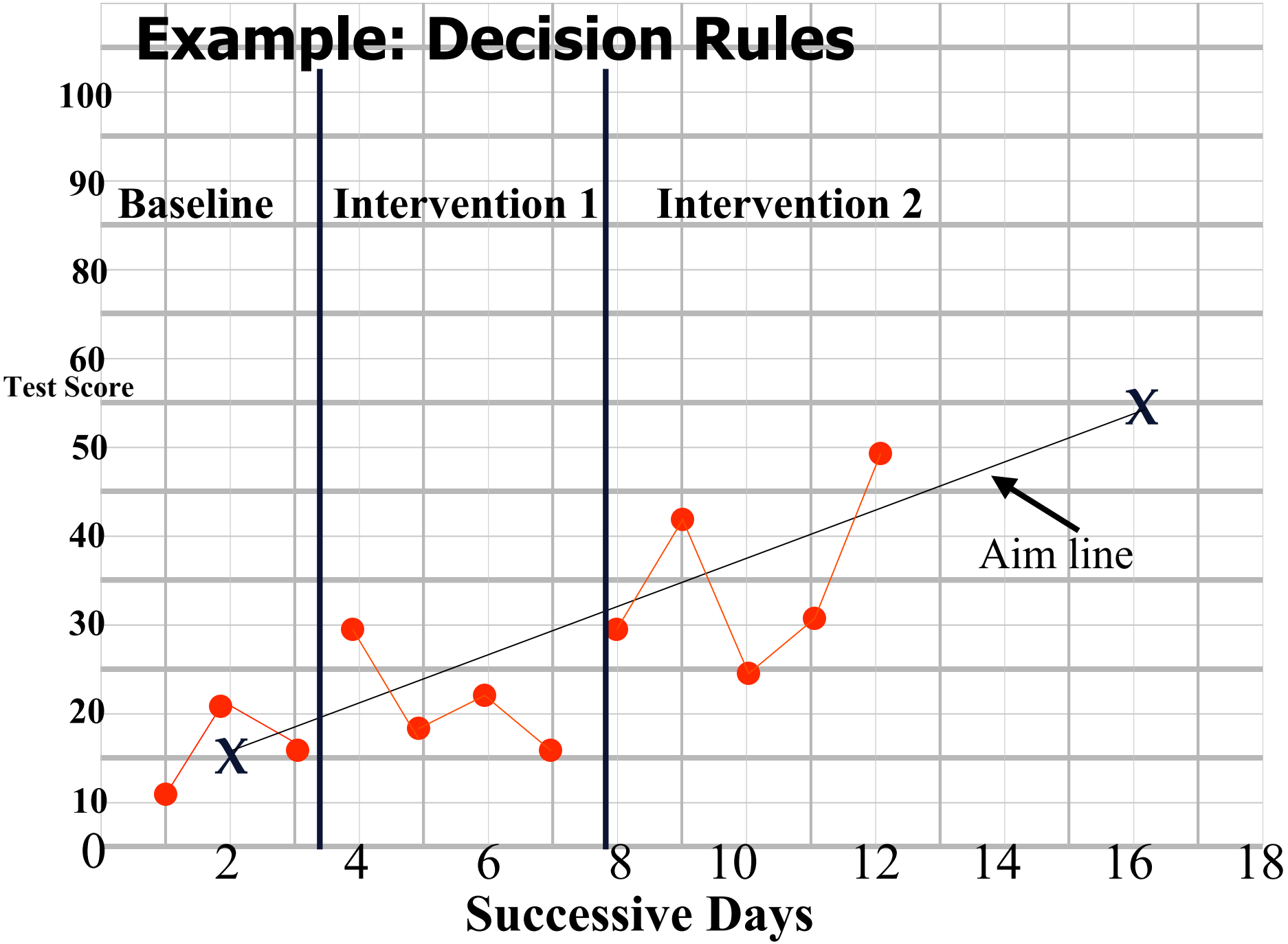
- A consistent rule is to make program changes when performance falls below the aimline (for accelerating behaviors) or above the aimline (for decelerating behaviors) for 3 consecutive days.
- Using aimlines and decision rules takes much of the guess work out of data analysis.

Example Decision Rules Are. . .

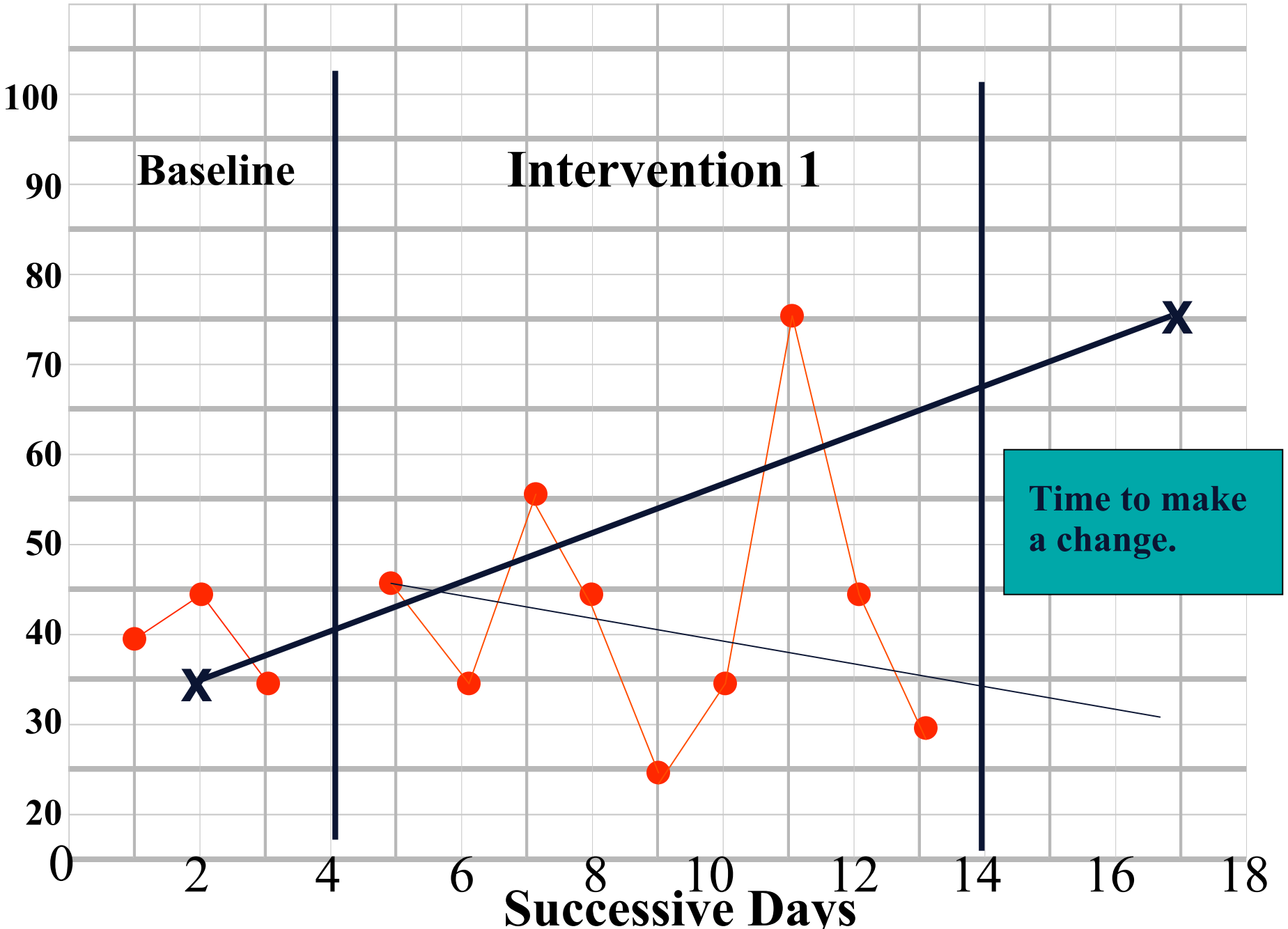
- **If a student's performance is below the aimline on 3 consecutive days, but is parallel to the aimline, one may decide to "wait" to see if student performance accelerates in level to reach the original aimline.**
- **If the student performance continues below the original aimline, implement a different teaching strategy. Draw a vertical line of the graph that symbolizes a change in the program.**
- **If the student's performance is above the aimline after 3 days (or wait another 3 days),**
  - it may be appropriate to raise the aimline. Draw a line parallel to and above the aimline.

(A variation of the 3-day rule is to compare the slope of actual improvement for the most recent 7 – 10 day period to the slope of expected improvement, which is reflected by the aimline).

Example: Decision Rules



Example: Decision Rules



Intervention-Oriented Decision Making

- **Intervention-oriented decision making has no formal rules for determining when to change programs, but has some guidelines.**
- **Generally, changes between adjustment phases are analyzed.**
  - Sometime after 5 days (which is the minimum number for evaluating an intervention), but no longer than 15 days (the maximum number of days for allowing any program to run), analyze the data and develop a program change.
- **Purpose is to compare data before the intervention to that following the intervention using analyses of (a) change in level, (b) slope, and (c) variability.**

Evaluate the Data

- **Assumptions to consider before evaluating the data**
  - Teacher is implementing instructional strategies
  - Student is actively engaged in instruction
  - Aimline has been correctly identified based on present levels of educational performance
- **Is the student making progress toward the goals?**
  - "Rule of Thumb" – If 4 of the last 6 data points fall below aimline, student is not making progress
    - Baseline data
    - Established timeline
    - Established aimline
- **How is the student responding to the intervention?**
    - Specially designed instruction
    - Instructional materials and methods

Evaluate the Data: Additional Decision Rules

Data Patterns	Interpretation	Suggestion
■ Making progress. Errors flat or decreasing.	■ Program is working.	■Continue present instructional program.
■ Progress stalled at 20%-50% correct.	■ Student can perform some but not all parts of the task.	■ Provide more direct or intensive instruction in difficult steps.
■ Progress at or near zero. High error rate.	■ Task is too difficult.	■ Teach prerequisite skills.
■ Progress stalled close to goal, no increase in rate.	■ Student is ready for fluency building.	■Provide frequent opportunities for practice to increase accuracy and rate.
■ Meets aimline.	■ Successful instructional program.	■Implement maintenance and generalization programs. Move on to new task.

Instructional Adjustments

- **If the student IS making progress…**
  - Celebrate!
  - Keep doing what you are doing
  - Consider increasing expectations as appropriate
    - Increasing accuracy/Decreasing errors
    - Increasing automaticity
    - Applying knowledge independently
- **If the student IS NOT making progress**
  - FIRST consider changes in intervention strategies
    - Specially Designed Instruction (intensity, duration, frequency)
    - Materials
    - Methods
    - Reinforcement schedule
    - Use of peers

Things to Take Away…

- Indicators of academic performance reflect academic skill development
- Data needs to be collected on a frequent (2x/week) basis for good decision-making
- Look at level, slope, variability of data
- Use decision rules when interpreting data
- Use knowledge of best teaching practices to develop good interventions